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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,978	03/12/2001	Hyo Sik Jeon	K-264	6940

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EXAMINER

JACKSON, BLANE J

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 08/12/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,978

Applicant(s)

JEON ET AL.

Examiner

Blane J Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The applicant argues for claims 3-20, the primary prior art Lim, does not teach a system that negotiates a data link between mobile terminals comprising setting up a RLP between the first mobile station an origination side base station and the MSC through a voice channel element (VCE) in a base station controller. Lim teaches the originating base station opens a RLP with the originating mobile terminal, calls the terminating mobile station, receives a response, then a RLP is opened between the terminating side base station and the terminating mobile data terminal followed by an AI layer in the terminating mobile terminal that demands a TCP passive open. Accordingly, a "communication path" is open between the mobile data terminals followed by further data protocols to connect the terminals (column 4, line 30 to column 5, line 42). Lim further teaches the "signal channel" is used by the terminating base station to inform the system of the busy/ ready status of the terminating data terminal (column 5, lines 30-42). Since it is well known the mobile telephone communicates voice and/ or data through the *traffic channel* with control signaling over the *control channel*, it is apparent that the communication path of Lim is the traffic channel, where the control or signaling channel activity is defined, such that the RLP is established between the mobile terminals through the MSC and serving base stations over the traffic or voice channel.

In reference to the above discussion, the nonstatutory double patenting rejection of the non-final action of 02 February 2004 stands.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-10 and 21-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lim (U.S. Patent 6,349,224).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 1, Lim teaches a method for making a data service in a communication system including:

Defining a particular service option on data service between a first mobile station and a second mobile station within the same network (figures 5 and 6, column 3, lines 1-12)

Setting up a data traffic path between a base station controller, the first mobile station and the MSC when the first mobile station requests the data service according to the particular service option (column 4, lines 20-49),

Checking the second mobile station making a response through the MSC according to the particular service option (column 4, lines 49-66),

Setting up the data traffic path between the first mobile station and the second mobile station by using the MSC and the base station controller when the second mobile station makes the response according to the particular service option (column 4, line 66 to column 5, line 8), and,

Carrying out data service between the first mobile station and the second mobile station through the data traffic path wherein the data traffic path travels *through* the MSC only once and the MSC services both the first mobile station and the second mobile station (figures 5 and 6 show the protocol where the data traffic path travels *through* the MSC only once with one MSC controlling base stations BS-0 (originating)

and BS-T (terminating), column 4, line 20 to column 5, line 42 – Note: reference, under heading of figure 4 teaches the architecture of figures 5 and 6 – one MSC, two BSC's).

As to claim 2, Lim teaches the MSC sets up the data traffic path between the first and second mobile station in interlock with a BSP, a CCP and a SBP in the base station controller (figures 5 and 6). It would be inherent for the system of LIM to functionally include at least one base station controller within the network with processors to direct the base stations under supervision of the MSC.

As to claims 3, 4, with respect to claim 1, claims 22 and 23 with respect to claim 21 and claims 28 and 29 with respect to claim 25, Lim teaches a method for making a data service in a communication system including:

Defining a particular service option on mutual data service between a first mobile station and a second mobile station within the same network,

When the first mobile station requests a call for the data service, the MSC checking the call being requested according to the particular service option (column 4, lines 30-49),

When the call is requested according to the particular service option, setting up a RLP between the first mobile station, and origination side base station and the MSC through a voice channel element (VCE) in a base station controller (column 4, lines 52-55),

Requesting a paging for the data service from the MSC to the second mobile station that is a destination side (column 4, lines 49–52),

When the second mobile station makes a response to the paging according to the particular service option, setting up a RLP between the second mobile station, the destination side base station and the base station controller through the VCE (column 4, line 66 to column 5, line 4),

Setting up a data traffic path between the first mobile station and the second mobile station by means of the MSC (column 5, lines 4-8), and,

Carrying out the data service between the first mobile station and the second mobile station through the data traffic path wherein the data traffic path travels through the MSC only once and the MSC services both the first mobile station and the second mobile station (figures 5 and 6, column 5, lines 9-14).

As to claims 5, 24 and 27 in reference to claims 1, 21 and 25 respectively, Lim teaches wherein a Point to Point Protocol (PPP) is set up between the origination side first mobile station and the destination side second mobile station (column 5, lines 4-8).

As to claims 6 and 8, Lim teaches an origination and terminating mobile station within the same wireless network in communication with a particular data service option (column 4, lines 30-35). Lim teaches the originating side base station (and inherent base station controller) sets up a RLP with the request for the particular data service option and the originating mobile station actuates a Point to Point protocol (PPP). Lim

teaches that once the terminating mobile gives a response, a RLP is opened between the terminating side base station and the terminating mobile data terminal. Lim further teaches the MSC completes the set up of a data traffic path for data transmission between the originating and terminating mobile stations through the origination and terminating side base stations (column 4, line 66 to column 5, line 6).

As to claim 7, Lim teaches a PPP is set up between the origination mobile station and the destination mobile station by means of the MSC (column 5, lines 4-8).

As to claim 9, Lim teaches a wireless network where the functions of the base station controller are required but is not clear as to how or where the base station controller functions are located. However, it is well known in the art to provide the functionality of the base station within an MSC, within a base station or to distribute the base station controller function in separate regions depending on the size of the network.

As to claim 10, Lim teaches a data terminal with an asynchronous or FAX type application connected to the mobile terminal through a standard interface such as RS-232 (figure 4, column 4, lines 20-33).

As to claims 21, 25 and 26, Lim teaches a method and communication system comprising:

defining a particular service option between a first mobile station and a second station (figure 4, column 4, line 20-44),

when the call is requested according to the particular service option, setting up a radio link protocol (RLP) between the first mobile station an origination side base station and a mobile switching center (MSC) through a voice channel element (VCE) in a base station controller (the "communication path" of Lim is the traffic or voice channel since the signaling and control channel activity is defined elsewhere, column 4, line 52 to column 5, line 8),

requesting a paging for the data service from the MSC to the second mobile station that is a destination side (column 4, lines 56-59),

when the second mobile station makes a response to the paging according to the service option, setting up a RLP between the second mobile station, the destination side base station and the base station controller through the VCE (column 4, line 59 to column 5, line 4),

setting up a data traffic path between the first mobile station and the second mobile station by means of the MSC (column 5, lines 4-14, and

performing the data service between the first mobile station and the second mobile station through the data traffic path.

4. Claims 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Preston et al. (U.S. Patent 6,681,121).

As to claims 11 and 16, Preston teaches a mobile switching center wherein:

If the mobile switching center is configured to service a first mobile unit over a first communication path and,

If the mobile switching center is configured to service a second mobile unit over a second communication path,

Then the mobile switching center is configured to connect the first communication path and the second communication path at the mobile switching center (figure 1 represents a usual cellular telecommunications switching system CTSS (38) with wireless connection to the cell phone (14) and landline connections or equivalent to the PSTN (42), Internet (46) and a server/ ISB modem (40), (28), column 2, lines 54 to 67).

As to claims 12, 13, 17 and 18, Preston teaches voice/ digital data transmission between mobile telephones, mobile to PSTN, mobile to Internet etc. where the infrastructure would include any usual configuration of mobile switching centers to switch the call between the design number of base station controllers and base stations depending on the location of the calling and called party (figure 1, column 2, lines 63 to column 63, line 5).

As to claims 14, 15, 19 and 20, Preston discloses a method for transmission of voice and digital data concurrent over a digital voice channel between mobile stations (figures 2, 3 and 9, column 3, line 41 to column 4, line 27 and to disclose the digital data is processed at the radiotelephones without additional equipment at the MSC, column 6, line 56 to column 7, line 15, also, note the data output port of figure 9 to the data

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external device or phone screen display, separate from the usual audio speaker and receiver (17)).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chang et al. (U.S. Patent 6,487,406) discloses a method for providing mobile IP connectivity between mobile stations of the PCS network to the Internet (data channel) where, as in conventional systems, the mobile station use the same general physical channel over the air interface with the base station for both voice and data. To provide more reliable and efficient transport for data traffic, a Radio Link Protocol (RLP) suitable for bursty computer traffic is employed over the air interface between the base and mobile units. Wang et al. (U.S. Patent 6,230,024) discloses a cellular system where a voice traffic channel is set-up as a data traffic channel negotiated by the radio link protocol during an active voice call.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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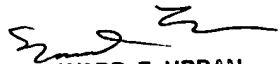
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J Jackson whose telephone number is (703) 305-5291. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ


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